

with railway civilization has done little to alter. Had I known before I met a tourist at Abisko that Kvikjock is now to be reached from Luleå and Joekmock without the least difficulty, I think I should have divided my attention in Lapland between these two places. As it was, I had made arrangements to return by the Norwegian coast, and on July 15th (the weather having again reverted to the worst), I determined to try my luck on the "other side," taking, the same afternoon, a steamer from Narvik—which in its surroundings promises well for entomological research—and, after yet another cold and wet day, arriving at Hammerfest towards the evening of the 16th.

(To be continued.)

ON SOME NEW GENERA AND SPECIES OF INDIAN ICHNEUMONIDÆ.

BY P. CAMERON.

ICHNEUMONINI.

LISSICHNEUMON, gen. nov.

Metaotum impunctate, shining; the areola longer than wide, its apex transverse, the base open, confluent with the lateral areæ, the lateral two being also confluent; the spiracular area open at the base on the outside; the spiracles linear. Scutellum keeled at the base. Petiole long, slender; the base slightly broader than it is high. Ventral keel distinct to the apex of the fourth segment. Areolet large, 5-angled. Transverse median nervure received shortly beyond the transverse basal; the disco-cubital broken by a stump.

The body is very smooth and shining; the first abdominal segment is longer and more slenderly built than usual, the post-petiole not being defined, the apical half becoming gradually, but not much, dilated; there are eight segments. Apices of tarsal joints spinose. Apex of clypeus bluntly rounded. Gastracœli shallow, small, smooth, the apex widely distant from the base of the segment. Base of meta-notum with a deep crenulated furrow. Labrum hidden.

The precise affinities of this genus may be left over for discussion when the female becomes known. It should be known by the very smooth and shining (including the meta-notum) body, by the confluent areola and lateral areæ of meta-notum, and by the long, slender abdominal petiole.

Lissichneumon levis, sp. nov.

Black; smooth and shining, the pleuræ, median segment and coxæ thickly covered with long white pubescence; the face, clypeus, mandibles except at the apex, a line on the inner orbits to opposite the ocelli, a line, gradually narrowed above, on the lower two-thirds of the

outer, a broad line on the pronotum not extending to the base, an interrupted line on the apex of the scutellum, dilated into a round spot at the apex of the keel, yellow; legs red; the four front coxæ and trochanters yellow; the hind coxæ and trochanters black. Under side of antennal scape yellow; the flagellum brownish below. Wings hyaline, the stigma and nervures black. ♂. Length, 12 mm.

May. Simla (Major C. G. Nurse).

Face and clypeus strongly but not closely punctured, the apex of the latter smooth; the apical row of punctures on it separated from the rest; the upper part of front and vertex sparsely, weakly punctured; the part between the ocelli more strongly and closely punctured. Scutellum somewhat densely covered with long white hair. Posterior median area from near the top stoutly, irregularly, longitudinally striated; spiracular area at the base and middle irregularly longitudinally striated; its apex with a few oblique ones.

HERESIARCHINI.

Stenodontus spilocephalus, sp. nov.

Black; the eye orbits except for a narrow line on the malar space, a narrow curved line below the antennæ, a mark in the lower part of the face in the middle, a large, wide, oblique mark on the sides of the clypeus, a line on the base of pronotum, one on the sides above, two lines on the middle of mesonotum, on the apical half, the sides and apex of scutellum, the scutellar keels, post-scutellum, a mark, longer than wide, on the apex of metanotum on the sides, tubercles, an oblique mark, dilated at the base above, roundly in the middle below, a more regular mark, narrowed at the apex, on the apex below and moderately broad lines on the apices of all the abdominal segments, pale yellow. Antennal scape dark rufous below; the tenth to sixteenth joints white below. Legs red, the four anterior coxæ largely yellow, the posterior black, yellow at the base below, and at the apex above; the trochanters marked with black, the apices of the tarsi blackish. Wings hyaline, the stigma pale testaceous, the nervures black. ♀. Length, 9 mm.

Simla. May (Major C. G. Nurse).

Head almost smooth; finely punctured at the ocelli; the pubescence short, white, sparse. Mandibles yellow at the base, the middle rufous, the apex black. Palpi white. Thorax finely, closely punctured; the scutellum more sparsely than the mesonotum; the latter is keeled laterally to shortly beyond the middle. Areola longish horseshoe-shaped; the round base margined by a narrow furrow, not by a keel; the apex is rounded inwardly; the basal half smooth, the apical weakly, irregularly striated; the part behind it is smooth, shining and confluent with the lateral areæ; the apical slope is more closely punctured than the rest. The first abdominal segment becomes gradually widened towards the apex, the post-petiole not being defined. Gastracæli separated, striated at the base, rufous at the apex; the middle segments are closely, minutely punctured; the apex is narrowed; the ovipositor largely projects. Areolet 4-angled, the nervures meeting in front, the recurrent nervure received in the middle; trans-

verse median nervure interstitial; disco-cubital broken by a minute stump.

What I take to be the male has the hind legs almost entirely black and the four anterior are darker coloured; the apex of the scutellum is black. The antennæ are black, stout, serrate towards the apex. The fore coxæ are for the greater part pale yellow; the middle yellow at the apex; the four posterior spurs are blackish, not reddish as in the female.

I should think, from their appearance, that the coloration of the legs varies a good deal.

This species appears to agree with *Stenodontus* (*Gnathoxys*, Wesm.), except that the scutellum is keeled laterally to shortly beyond the middle: according to the generic definitions *Stenodontus* has it margined only at base.

JOPPINI.

GLYPTOJOPPA, gen. nov.

Scutellum roundly convex, rounded behind; the sides not margined. Metanotum deeply, widely depressed at the base, the areola horseshoe-shaped; the other areæ distinct; the segment is short and with the sides broadly rounded. Areolet 5-angled, wide in front; the disco-cubital nervure broken by a very long stump; the transverse median nervure received distinctly beyond the transverse basal. Post-petiole wide, clearly separated; there is a distinct, deep, transverse furrow at the base of the third segment; it is closely striated.

The antennæ are short, taper towards the apex, and are serrate. Temples wide, obliquely, roundly narrowed; the occiput slightly incised. Wings yellowish hyaline, the apex clouded.

The metanotum is more regularly areolated than in typical *Joppini*, but in other respects it agrees more with that group than with the *Ichneumonini*, e. g., in the form of the scutellum, and in the deep depression at the base of the metanotum. Its characteristic features are the roundly convex scutellum, deeply depressed base of metanotum, horseshoe-shaped areola, and the deep, striated furrow at the base of the third abdominal segment.

Glyptojoppa sulcata, sp. nov.

Testaceous, the mesonotum more rufous in tint; the breast, the antennæ towards the apex and the furrows at the base of the third abdominal segment, black; wings hyaline, tinged with yellow; the apex from the stigma smoky; the stigma and nervures testaceous. ♂. Length 14 mm.

Middle Tenasserim, Salween Valley. July (C. T. Bingham).

Head and thorax closely, distinctly punctured, covered with a short fulvous pile; the scutellum has a longer pile; the median segment more rugosely punctured and with a longer and denser pile. Abdomen closely, distinctly punctured, the post-petiole more strongly than the rest; the gastraceli deep, with three oblique keels on the outer side

and three straight ones on the inner side; the furrow or the third segment is wider in the middle and is closely striated there; the sides are smooth.

(To be continued.)

NOTES AND OBSERVATIONS.

PYRAMEIS CARDUI AND OTHER PROBABLY IMMIGRANT SPECIES.—With reference to Mr. R. Adkin's note in 'Entomologist,' p. 173-174, *Pyrameis cardui*, *Plusia gamma*, and *Nomophila noctuella* were abundant on the North Cornish coast on the day of my arrival there, June 2nd last, and during the following week. There seems to have been a great abundance of these three species in the west and south-west of Europe this year. During a recent holiday on the Continent in July and August, I found them wherever I made any observations, including in the following districts: Department of Aisne, some fifty miles east of Paris; in all districts in the Isle of Corsica; the Alpes-Maritimes, a little to the north of Nice; Beauvezer, in the Verdom Valley; and Digne, in the Basses-Alpes. In the neighbourhood of Vizzavona, in Corsica, at an altitude of about 3500 feet, *P. cardui* especially swarmed, and far outnumbered every other large Diurni occurring there. On the evening of the 3rd June, I took my net, and walked at dusk along the top of the cliffs on the North Cornish coast; there was a small light-coloured *noctua* flying about here in some numbers—probably I saw about two dozen specimens. The ground was difficult, however, and I only succeeded in netting four examples. My surprise was great on getting back to my lodgings to find these were *Laphygma exigua*, which, so far as I am aware, has not been recorded from this coast. On the following evening I sugared on the spot, but only obtained one specimen of *L. exigua*. I, however, boxed two examples of *Heliothis armiger* from the sugar. On subsequent nights I obtained at sugar one more specimen each of both these species. Although some of the *L. exigua* especially were perfect specimens, all the examples of both species were in a condition that would lead one to suppose they had flown a long distance, and I have not much doubt but that they had crossed the sea. I may mention that *Heliothis armiger* was common in the neighbourhood of Vizzavona, in Corsica, where it had much the same habits as *Plusia gamma*, settling in the day-time in the grass, and flying off very much after the style of that species when disturbed.—W. G. SHELDON; Youlgreave, South Croydon, Sept. 18th, 1906.

JOINT COCOONS.—I was much interested to see the note under the heading, "Joint Cocoons," in the August number of the 'Entomologist,' as I have had a similar experience in breeding *Malacosoma neustria* and *Eriogaster lanestris* this year. In the case of the former, I imagine that the use of joint cocoons was more or less due to the exigencies of pupation within the comparatively narrow limits of a small breeding-cage. I give the figures, as I think them rather interesting. Forty-